VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

April 6, 2020

Judith C. Whitney
Clerk of the Commission
Vermont Public Utility Commission
112 State Street
Montpelier, VT 05620-2701

Re: Advance Notice for a Proposed 500 kW Solar Project to be Located on the Closed Landfill at 80 Pine Street in the Town of Bristol, Vermont.

Introduction

On behalf of Acorn Renewable Energy Co-op, based in Middlebury VT (the "Applicant"), Aegis Renewable Energy, Inc. ("Aegis"), a Vermont corporation, is pleased to submit this 45-day advance notice for a proposed 500 kW (AC)[1] community net metered solar electric generating facility to be located on the closed municipal landfill at 80 Pine Street, Bristol, Vermont (the "Project"). The Applicant intends to file a Section 8010 application ("Application") with the Vermont Public Utility Commission ("Commission") and is providing this advance notice to all those entitled to advance notice under Commission Rule 5.107(B)(1). We have searched the ACT250 database located here: https://anrweb.vt.gov/anr/vtanr/Act250.aspx and there do not appear to be any ACT250 permits associated with this site.

This advance notice: (1) describes the Project; (2) provides a preliminary assessment of potential Project environmental and aesthetic impacts; and (3) explains how comments regarding the Project can be filed with Aegis and the Commission. Also included with this advance notice are the following attachments:

A. Location Map
B. Conceptual Site Plan
C. Solar Module & Inverter Specifications

I. Project Description

A. Project Site

The proposed Project will be located on Bristol's closed landfill located at 80 Pine Street in Bristol, Vermont. The ballast mounted array will cover approximately 2.43 acres. The fenced area surrounding the array will enclose approximately 3.10 acres of the landfill, which is a 12.34 acre parcel of land. The parcel is owned by the Town of Bristol and is identified as

[1] The size of the system may be less than or equal to 500 kW (AC) depending on the results of the System Impact Study.

parcel number 060153 in the Town of Bristol land records.

B. Description of the Solar Facility

The proposed Project will be a 500 kW (AC) ground-mounted solar electric generation facility consisting of fixed racking, solar panels ("modules"), inverters, and other associated equipment. Final Project size may be less than or equal to 500 kW (AC) depending on the results of the Project's System Impact Study.

Using standard construction practices, galvanized steel posts (the "racking") will be set into cast-in-place concrete above-ground ballasts. The Project will not penetrate the earthen landfill cap. The racking will hold the modules at a fixed angle of 30 degrees in order to maximize solar radiance collection and will be installed in approximately Sixteen (16) rows ranging in length from 83 feet to 270 feet.

Approximately 1,862 Boviet 400 Watt solar modules (or equivalent) will be installed on top of the racking. The modules will be connected to four (4) Sungrow 125kW (or equivalent) inverters. The inverters will be mounted below the racking or on a separate back panel adjacent to the solar array. See Attachment C – Solar Module & Inverter Specifications for more detailed information about the modules and inverters.

Year-round, daily Project access is not required. Therefore, no on-site septic or water supply systems will be constructed. The Project will be monitored remotely and if any unexpected conditions develop, Aegis technicians will be dispatched.

After 25 years a decision will be made as to whether to continue operating the Project as is or with new equipment or whether to decommission it. When the Project is no longer in service, it will be removed and the site will be restored to its condition prior to installation of the Project to the greatest extent practicable in accordance with Commission Rule 5.904(A).

Attachment B - Conceptual Site Plan demonstrates the current Project proposal. The Application will include a Final Site Plan. The Final Site Plan may be different from the Conceptual Site Plan, depending on the results of the System Impact Study.

C. Site Access and Equipment Delivery

The Project site will be accessed via a dirt road at the west end of Pine Street. Typical tractor trailer and box truck vehicles will be used to transport materials to the Project site for construction. In-state roads most likely to be used for delivery include: Pine Street, West Street (Rte. 116), North Street, and Liberty Street. The completed Project will not alter or impede access to the existing gravel and equipment storage area currently being utilized by the Bristol public works department.

II. Preliminary Impact Assessment

A. Environmental Impact

Prior to filing the CPG petition, an in-depth environmental analysis will be conducted. However, based on an initial environmental impact review, the Project will avoid impacts to environmental resources because of its location on a closed municipal landfill. In sum:

- The Project will be located in the disturbed portion of a recently closed town landfill.
- The Project will not adversely impact wildlife habitat, endangered species, or rare and irreplaceable natural areas.
- The solar array foundations/ballast will be concrete poured in place, above existing ground level. These foundations require no excavation.
- All electrical conductors will either be routed overhead or above ground on concrete sleepers.
- The array perimeter will be fenced in accordance with National Electric Safety Code requirements and fence posts will not penetrate through the landfill's earthen cap.
- There will be no contour grading done at the site.
- We are advised by the engineer who designed the landfill that it is not capped with a membrane. The cap is strictly earthen on top of compacted solid waste.
- It is unlikely that the Project will require any municipal services (fire, police, water/sewer), and it will not impact the ability of the Town to provide educational services. In fact, the Project management has volunteered to provide Project energy production data to the Mt. Abraham Union High School for use by teachers and students in order to enhance the educational services.

See Attachment B – Conceptual Site Plan for a visualization of natural resources in the Project area. Aegis will provide additional environmental impact information in its Application.

B. Aesthetic Impact

The proposed Project will not have an undue adverse impact on the aesthetics of the area. This is due to naturally existing screening provided by forested areas between the array and all properties adjoining the site.The landfill's elevation above an existing town nature trail obscures the majority of the project site from most sections of the trail. See Attachment A – Location Map for the Project's proposed location. An in-depth aesthetics assessment will be submitted with the Application.

C. Archaeological or Historical Impact

Based on a preliminary review, and the fact that the Project is entirely within the extents of the disturbed portion of the landfill, we do not anticipate the Project impacting archaeological or historic resources. A more detailed analysis will be provided in the CPG Application.

III. Opportunities to File Inquiries or Comments

You may file any inquiries or comments with Aegis about the proposed Project within 45 days of the date of this letter. Below is my contact information:

Address	Nils Behn, CEO Aegis Renewable Energy, Inc.

	340 Mad River Park, Suite 6 Waitsfield, VT 05673
Phone	802-560-0055
Email	nbehn@aegis-re.com

You will also have an opportunity to file comments with the Commission once the Application is filed.

Thank you for your attention to this matter. We welcome your input and suggestions to make this Project a success.

IV. Informational Meeting and Site Visit for Adjoining Landowners

Aegis will be holding an informational conference call on **Thursday April 9th at 5:30 PM** for all adjoining landowners who wish to participate. If questions require the call to go longer, we will stay on to answer all questions. The call-in number is 1-559-546-1200 and the access code is 197-595-705#. Nils Behn, Aegis' founder, will host the call, explain the Project's goals and take questions. Representatives of the Acorn Renewable Energy Co-op will also be in attendance.

Sincerely,

Nils Behn, CEO
Aegis Renewable Energy, Inc.
340 Mad River Park, Suite 6
Waitsfield, VT 05673
802-560-0055
nbehn@aegis-re.com

Attachments: Certificate of Service
Attachment A – Property Location Map
Attachment B – Conceptual Site Plan
Attachment C – Solar Module & Inverter Specifications

cc: Greg Pahl, President, Acorn Renewable Energy Co-op.

ATTACHMENT A:
Bristol Landfill Array Location Map

80 Pine Street, Bristol Vermont 05443

Project Location

Legend

Project Location

Hidden Dr
Frances Pl
Crescent St
Pine St
Fitch Ave
Elm St
Taylor Ave
Spring St
Mountain St
Pleasant St
Liberty St
Munsill Ave
Maple St
Church St
North St
Garfield St
Mountain View St
School St
Park St
Prince Ln
Bristol
Airport Dr
Rockydale Rd
South St
Rumpheuse Rd
Basin St
Burpee Rd

Google Earth

N

1000 ft

ATTACHMENT B

SITE PLAN BASED OFF SURVEYING PERFORMED BY GREEN MOUNTAIN ENGINEERING, INC., IN OCTOBER OF 2015. SEE ORIGINAL NOTES FOR FURTHER DETAIL

ELECTRICAL EQUIPMENT INFORMATION

BOVIET SOLAR: BVM6612M-400L-BF-DG
QTY. 1862 400W
ELECTRICAL CHARACTERISTICS (STC)

- MAX. POWER CURRENT (IMP): 9.98A
- MAX. POWER VOLTAGE (VMP): 40.16V
- SHORT CIRCUIT CURRENT (ISC): 10.45A
- OPEN CIRCUIT VOLTAGE (VOC): 49.15V
- SIZE: 79.45" X 39.53" X 1.38"
- WEIGHT: 61.73 LBS.

SUNGROW SG125HV
QTY: 4 125.0KW

INPUT (DC)

- MAX DC VOLTAGE: 1500V
- RATED MPPT VOLTAGE RANGE: 860-1250 VDC
- MPPT OPERATING VOLTAGE RANGE: 860-1450 VDC
- MAX. INPUT CURRENT: 148 ADC
- MAX DC SHORT-CIRCUIT CURRENT: 240 ADC

OUTPUT (AC)

- RATED AC POWER OUTPUT: 125,000 W
- NOMINAL AC VOLTAGE: 3 / PE 600 VAC
- AC VOLTAGE RANGE: 480 VAC - 690 VAC
- MAX OUTPUT CURRENT: 120 A
- NOMINAL OUTPUT FREQUENCY: 60 HZ

UTILITY INFORMATION
GREEN MOUNTAIN POWER

LINE LEGEND

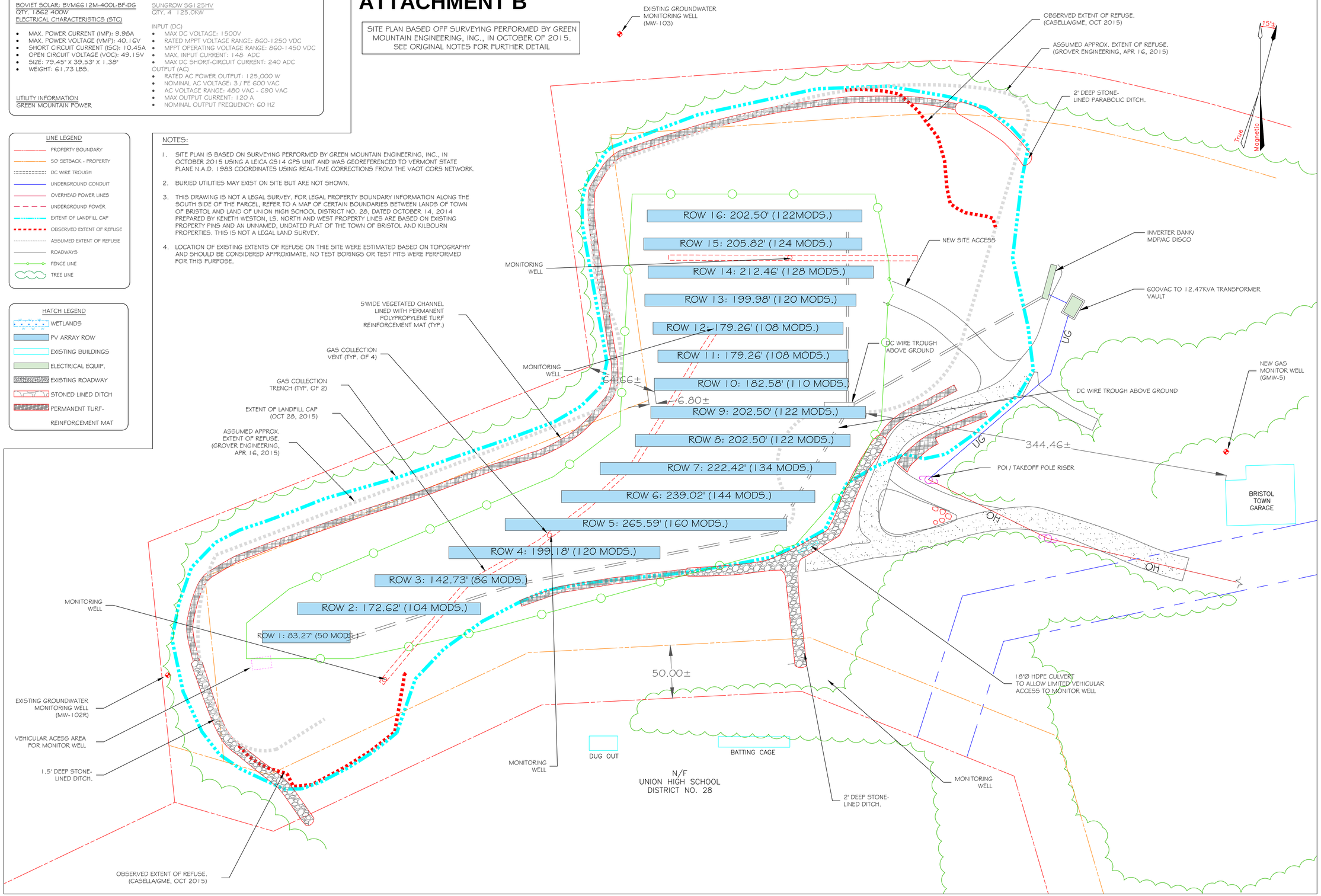
- PROPERTY BOUNDARY
- 50' SETBACK - PROPERTY
- DC WIRE TROUGH
- UNDERGROUND CONDUIT
- OVERHEAD POWER LINES
- UNDERGROUND POWER
- EXTENT OF LANDFILL CAP
- OBSERVED EXTENT OF REFUSE
- ASSUMED EXTENT OF REFUSE
- ROADWAYS
- FENCE LINE
- TREE LINE

HATCH LEGEND

- WETLANDS
- PV ARRAY ROW
- EXISTING BUILDINGS
- ELECTRICAL EQUIP.
- EXISTING ROADWAY
- STONED LINED DITCH
- PERMANENT TURF-REINFORCEMENT MAT

NOTES:

1. SITE PLAN IS BASED ON SURVEYING PERFORMED BY GREEN MOUNTAIN ENGINEERING, INC., IN OCTOBER 2015 USING A LEICA GS14 GPS UNIT AND WAS GEOREFERENCED TO VERMONT STATE PLANE N.A.D. 1983 COORDINATES USING REAL-TIME CORRECTIONS FROM THE VAOT CORS NETWORK.
2. BURIED UTILITIES MAY EXIST ON SITE BUT ARE NOT SHOWN.
3. THIS DRAWING IS NOT A LEGAL SURVEY. FOR LEGAL PROPERTY BOUNDARY INFORMATION ALONG THE SOUTH SIDE OF THE PARCEL, REFER TO A MAP OF CERTAIN BOUNDARIES BETWEEN LANDS OF TOWN OF BRISTOL AND LAND OF UNION HIGH SCHOOL DISTRICT NO. 28, DATED OCTOBER 14, 2014 PREPARED BY KENETH WESTON, LS. NORTH AND WEST PROPERTY LINES ARE BASED ON EXISTING PROPERTY PINS AND AN UNNAMED, UNDATED PLAT OF THE TOWN OF BRISTOL AND KILBOURN PROPERTIES. THIS IS NOT A LEGAL LAND SURVEY.
4. LOCATION OF EXISTING EXTENTS OF REFUSE ON THIE SITE WERE ESTIMATED BASED ON TOPOGRAPHY AND SHOULD BE CONSIDERED APPROXIMATE. NO TEST BORINGS OR TEST PITS WERE PERFORMED FOR THIS PURPOSE.



SITE PLAN
1" = 40'

GRAPHIC SCALE
40 0 40 80 120 160 FEET

aegis RENEWABLE ENERGY
ATTN: TOM FLYNN - TFLYNN@AEGIS-RE.COM
340 MAD RIVER PARK, SUITE 6
WAITSFIELD, VT 05673
802-560-0055
WWW.AEGIS-RE.COM

REVISIONS

NO.	DESCRIPTION	DATE	BY

USE OF THESE DRAWINGS

1. UNLESS OTHERWISE NOTED, THESE DRAWINGS ARE INTENDED FOR PRELIMINARY PLANNING, COORDINATION WITH OTHER DISCIPLINES OR UTILITIES, AND/OR APPROVAL FROM REGULATORY AUTHORITIES. THEY ARE NOT INTENDED AS CONSTRUCTION DRAWINGS UNLESS NOTED AS SUCH OR MARKED APPROVED BY A REGULATORY AUTHORITY.
2. BY USE OF THESE DRAWINGS BY PARTIES OTHER THAN AEGIS RENEWABLE ENERGY FOR CONSTRUCTION OF THE PROJECT, THE ENTITY REPRESENTS THAT THEY HAVE REVIEWED, APPROVED, AND ACCEPTED THE DRAWINGS, OBTAINED ALL NECESSARY PERMITS, AND HAVE MET WITH ALL APPLICABLE PARTIES/DISCIPLINES, INCLUDING, BUT NOT LIMITED TO, CONTRACT DOCUMENTS, SPECIFICATIONS, OWNER/CONTRACTOR AGREEMENTS, BUILDING AND MECHANICAL PLANS, PRIVATE AND PUBLIC UTILITIES, AND OTHER PERTINENT PERMITS FOR CONSTRUCTION.
3. AEGIS AND THEIR ENGINEER, ARE RESPONSIBLE FOR FINAL DESIGN AND LOCATION OF BUILDINGS SHOWN, INCLUDING AN AREA MEASURED FIVE (5) FEET AROUND ANY BUILDING AND COORDINATING FINAL UTILITY CONNECTIONS SHOWN ON THESE PLANS.
4. PRIOR TO USING THESE PLANS FOR CONSTRUCTION LAYOUT, THE USER SHALL CONTRACT AEGIS RENEWABLE ENERGY TO ENSURE THE PLAN CONTAINS THE MOST CURRENT REVISIONS.
5. THESE DRAWINGS ARE SPECIFIC TO THE PROJECT AND ARE NOT TRANSFERABLE. AS INSTRUMENTS OF SERVICE, THESE DRAWINGS, AND COPIES THEREOF, FURNISHED BY AEGIS RENEWABLE ENERGY ARE ITS EXCLUSIVE PROPERTY. CHANGES TO THE DRAWINGS MAY ONLY BE MADE BY AEGIS RENEWABLE ENERGY. IF ERRORS OR OMISSIONS ARE DISCOVERED, THEY SHALL BE BROUGHT TO THE ATTENTION OF AEGIS RENEWABLE ENERGY IMMEDIATELY.
6. IT IS THE USER'S RESPONSIBILITY TO ENSURE THIS COPY CONTAINS THE MOST CURRENT REVISIONS. IF UNSURE, PLEASE CONTACT AEGIS RENEWABLE ENERGY

PROJECT TITLE AND DETAILS

FOR PERMITTING

PROJECT TITLE AND DETAILS

AE3
BRISTOL LANDFILL
744,800 W DC
500,000 W AC

SHEET TITLE

PERMITTING SITE PLAN

DATE:	04/03/2020
SCALE:	1"=40'
PROJECT NUMBER:	TBD
DRAWN BY:	D.M.
PROJECT ENGINEER:	T.A.F.
APPROVED BY:	T.A.F.
FILE LOCATION:	ENGINEERING / SITE LAYOUT DWGS / FOR CONSTRUCTION

C2-01

SG125HV

String Inverter for 1500 Vdc System

SUNGROW
Clean power for all

HIGH YIELD

- Patented five-level topology, max. efficiency 98.9 %, European efficiency 98.7 %, CEC efficiency 98.5 %
- Full power operation without derating at 50 ℃
- Patented anti-PID function

EASY O&M

- Virtual central solution, easy for O&M
- Compact design and light weight for easy installation

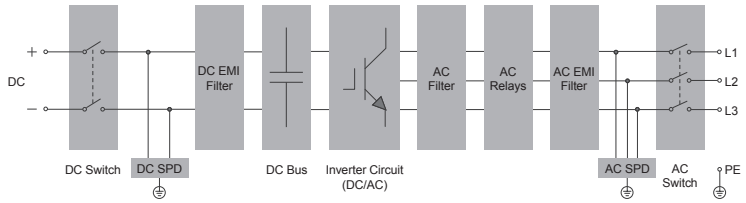
SAVED INVESTMENT

- DC 1500V,AC 600V, low system initial investment
- 1 to 5MW power block design for lower AC transformer and labor cost
- Max.DC/AC ratio up to 1.5

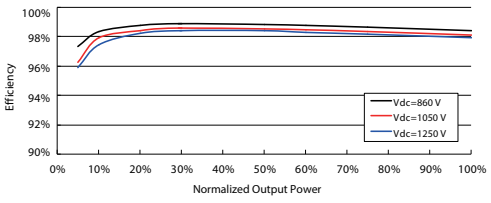
GRID SUPPORT

- Compliance with both IEC and UL safety,EMC and grid support regulations
- Low/High voltage ride through(L/HVRT)
- Active & reactive power control and power ramp rate control

CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG125HV
Input (DC)	
Max. PV input voltage	1500 V
Min. PV input voltage / Start-up input voltage	860 V / 920 V
Nominal PV input voltage	1050 V
MPP voltage range	860 – 1450 V
MPP voltage range for nominal power	860 – 1250 V
No. of independent MPP inputs	1
No. of DC inputs	1
Max. PV input current	148 A
Max. DC short-circuit current	250 A
Output (AC)	
AC output power	125 kVA @ 50 ℃
Max. AC output current	120 A
Nominal AC voltage	3 / PE, 600 V
AC voltage range	480 – 690 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % In
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading - 0.8 lagging
Feed-in phases / connection phases	3 / 3
Efficiency	
Max. efficiency / European efficiency	98.9% / 98.7%
CEC efficiency	98.5%
Protection	
DC reverse connection protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch	Yes
AC switch	Yes
Q at night function	optional
Anti-PID function	Yes
Overvoltage protection	DC Type II / AC Type II
General Data	
Dimensions (W*H*D)	670*902*296 mm 26.4''*35.5''*11.7''
Weight	76 kg 167.5 lb
Isolation method	Transformerless
Degree of protection	IP 65 NEMA 4X
Night power consumption	< 4 W
Operating ambient temperature range	-30 to 60 ℃ (> 50 ℃ derating) -22 to 140 ℉ (> 122 ℉ derating)
Allowable relative humidity range (non-condensing)	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating) 13123 ft (> 9843 ft derating)
Display / Communication	LED, Bluetooth+APP / RS485
DC connection type	OT or DT terminal (Max. 185 mm² 350 Kcmil)
AC connection type	OT or DT terminal (Max. 185 mm² 350 Kcmil)
Compliance	UL1741, UL1741SA, IEEE1547, IEEE1547.1, CSA C22.2 107.1-01-2001, FCC Part15 Sub-part B Class A Limits, California Rule 21, IEC 62109-1/-2, IEC 61000-6-2/-4, IEC 61727, IEC62116, BDEW, EN50549,VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, UNE 206007-1:2013, P.O.12.3, UTE C15-712-1:2013, CEI 0-16:2017, IEC 61683, PEA, NTCO
Grid Support	LVRT, HVRT, ZVRT, active & reactive power regulation, PF control, soft start/ stop

BOVIET SOLAR USA

Advancing the Power of the Sun

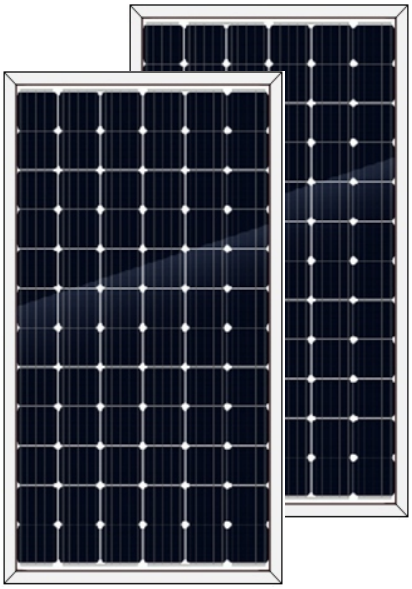
Bificial Module 385-400W

BVM6612M(L)-(SERIES)BF-DG

0~+5W
Power Tolerance

19.8%
Maximum Efficiency

385-400W
Power Output Range



39.45x79.33 Inches

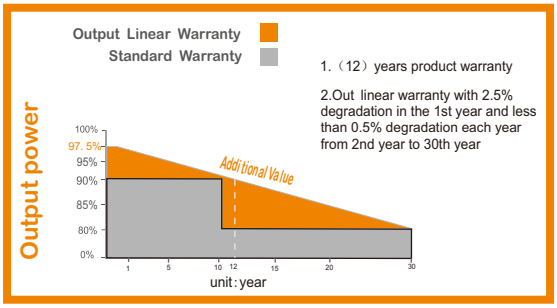
Silver Frame / Double-sided glass

High Quality and Reliable Modules

- Double-sided glass technology, more power generation
- Withstand up to 5400 Pa snow load and 2400 Pa wind load
- 2 EL inspections per cell/module for defect-free consistency
- Type 1 fire-rating per UL 1703 edition 3
- High salt and ammonia resistance certified by TUV Rheinland
- 0~+5 W guaranteed positive tolerance
- Rugged design for long-term durability; passed extended reliability tests

Warranty

- 12-year product warranty
- 30-year linear power output warranty



Comprehensive Certificates for Products and Management

- UL 1703, IEC 61215, IEC 61730, CEC listed, MCS and CE
- ISO 9001 for Quality Management Systems
- ISO 14001 for Environmental Management Systems
- OHSAS 18001 Occupational Health and Safety Systems

Listed in Bloomberg New Energy Finance's tier 1 list as of 1Q 2018

2107 N 1st Street Suite 550 San Jose, CA 95131

BOVIETSOLARUSA.COM ◆ 877.253.2858 ◆ SALES@BOVIETSOLARUSA.COM

Electrical Characteristics STC

	BVM6612M-385L-BF-DG	BVM6612M-390L-BF-DG	BVM6612M-395L-BF-DG	BVM6612M-400L-BF-DG
Maximum Power (Pmax)	385W	390W	395W	400W
Maximum Power Current (Imp)	9.74A	9.82A	9.90A	9.98A
Maximum Power Voltage (Vmp)	39.60V	39.79V	39.98V	40.16V
Short Circuit Current (Isc)	10.26A	10.33A	10.42A	10.45A
Open Circuit Voltage (Voc)	48.45V	48.65V	48.85V	49.15V
Module Efficiency	19.1%	19.3%	19.6%	19.8%
Power Tolerance	0~+5W	0~+5W	0~+5W	0~+5W

STC: AM1.5, Irradiance 1000W/㎡, 25°C

Electrical Characteristics NOCT

	BVM6612M-385L-BF-DG	BVM6612M-390L-BF-DG	BVM6612M-395L-BF-DG	BVM6612M-400L-BF-DG
Maximum Power (Pmax)	284W	286W	290W	295W
Maximum Power Current (Imp)	7.77A	7.81A	7.86A	7.93A
Maximum Power Voltage (Vmp)	36.6V	36.7V	36.9V	37.20V
Short Circuit Current (Isc)	8.26A	8.33A	8.40A	8.47A
Open Circuit Voltage (Voc)	45.2V	45.5V	45.8V	46.1V

NOCT: AM1.5, Irradiance 800W/㎡, 20°C, Wind speed 1m/s

Mechanical Characteristics

Solar Cell	Bificial-Monocrystalline 6.25 x 6.25 inch, 72 (6 x 12) pcs. in series
Double glass	2.5mm AR coating tempered glass+2.5mm Semi-tempered glass,low iron
Frame	Anodized aluminum alloy
Junction Box	Ip67 rated, with 3 bypass diode
Output Cable	4 mm² (EU)/12 AWG (US),15.76 inch
Connector	MC4 compatible
Dimension	79.33x39.45x1.38 Inches
Weight	61.73lb

Thermal Characteristics

Pmax Temperature Coefficient	-0.38%/K
Voc Temperature Coefficient	-0.30%/K
Isc Temperature Coefficient	+0.06%/K
NOCT	113±3.6°F

Maximum Ratings

Operating Temperature	-40°F~185°F
Maximum Series Fuse Rating	20A
Maximum System Voltage	1000/1500V DC

Packing Information

Pieces per pallet	30
Pallets per container (40HQ)	22
Pieces per container (40HQ)	660
Pallet weight/size	1918 lb/80.66 x 43.31 x 45.88 inch

Bifacial Output-Backside Power Gain

10%	Pmax (W)	423	429	434	440
	Module efficiency (%)	20.91	21.21	21.45	21.75
20%	Pmax (W)	462	468	474	480
	Module efficiency (%)	22.84	23.13	23.43	23.73